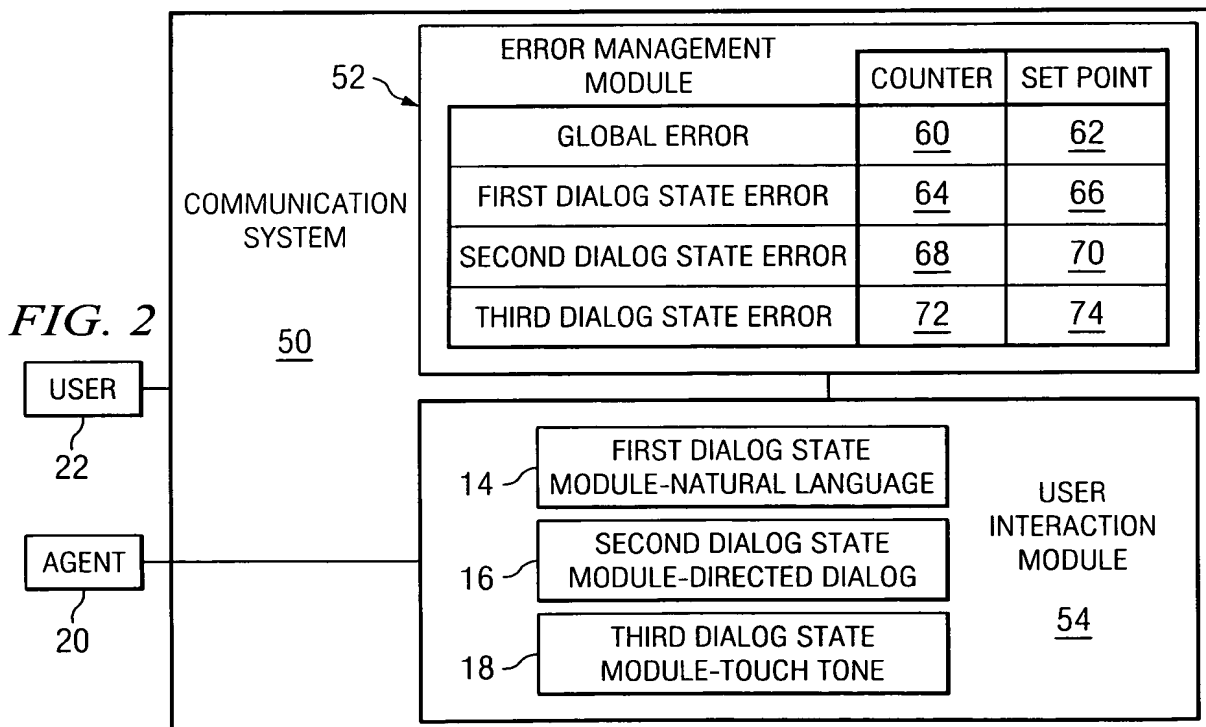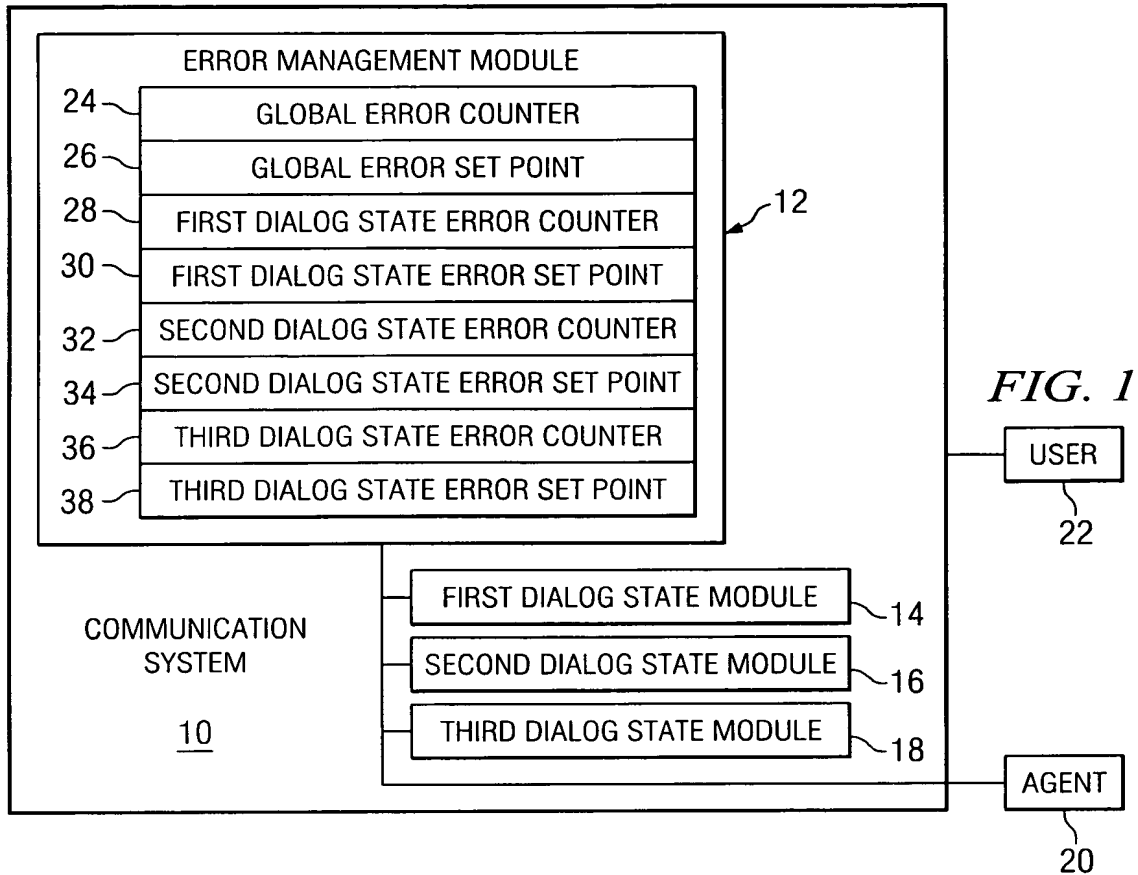*System and Method for Managing Recognition
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ERROR MANAGEMENT MODULE

24 — GLOBAL ERROR COUNTER
26 — GLOBAL ERROR SET POINT
28 — FIRST DIALOG STATE ERROR COUNTER
30 — FIRST DIALOG STATE ERROR SET POINT
32 — SECOND DIALOG STATE ERROR COUNTER
34 — SECOND DIALOG STATE ERROR SET POINT
36 — THIRD DIALOG STATE ERROR COUNTER
38 — THIRD DIALOG STATE ERROR SET POINT

—12

FIG. 1

USER

22

COMMUNICATION
SYSTEM

10

FIRST DIALOG STATE MODULE ~14
SECOND DIALOG STATE MODULE ~16
THIRD DIALOG STATE MODULE ~18

AGENT

20

FIG. 2

52

COMMUNICATION
SYSTEM

50

ERROR MANAGEMENT MODULE	COUNTER	SET POINT
GLOBAL ERROR	60	62
FIRST DIALOG STATE ERROR	64	66
SECOND DIALOG STATE ERROR	68	70
THIRD DIALOG STATE ERROR	72	74

USER

22

AGENT

20

14 — FIRST DIALOG STATE
MODULE-NATURAL LANGUAGE

16 — SECOND DIALOG STATE
MODULE-DIRECTED DIALOG

18 — THIRD DIALOG STATE
MODULE-TOUCH TONE
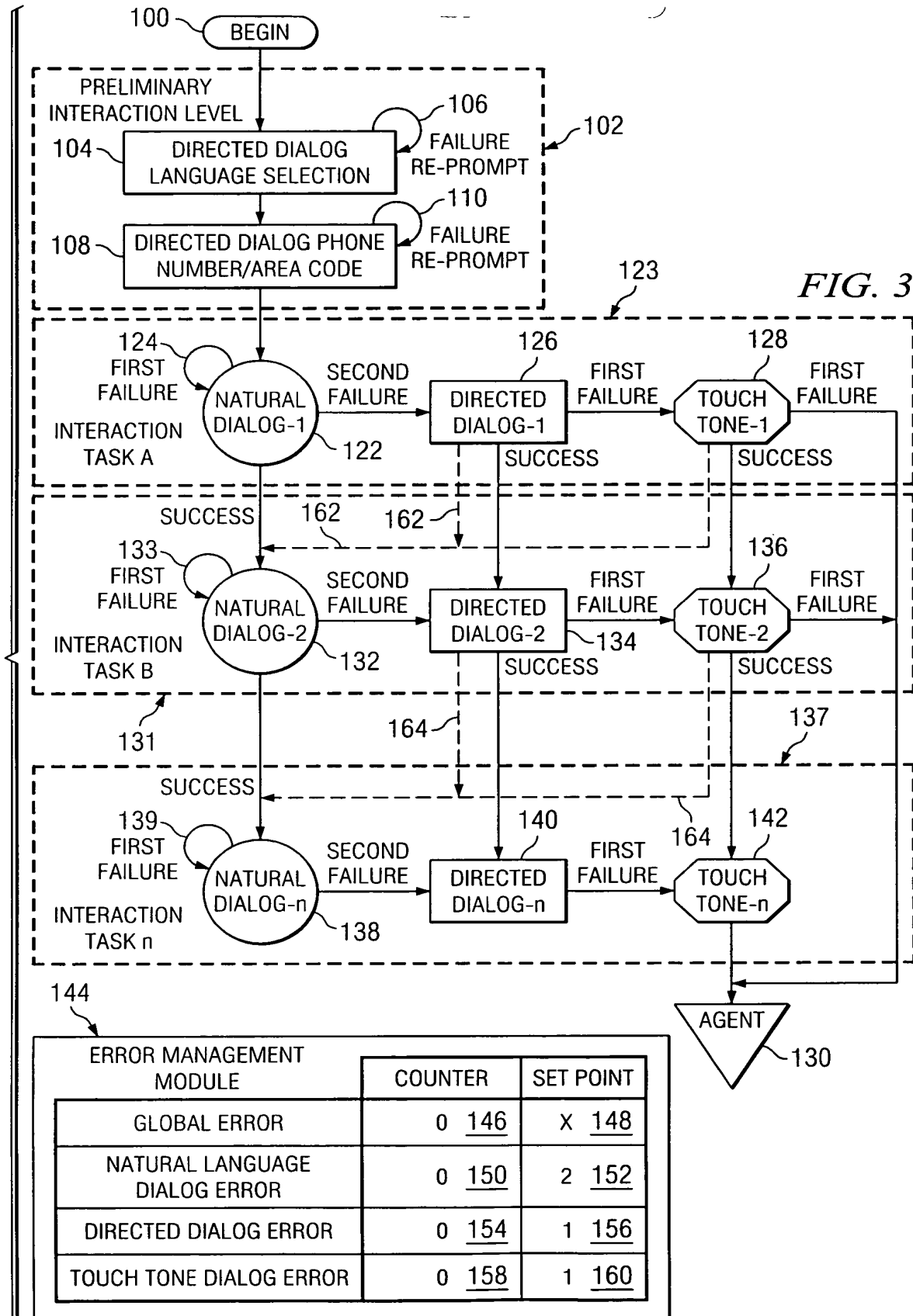
USER
INTERACTION
MODULE

54

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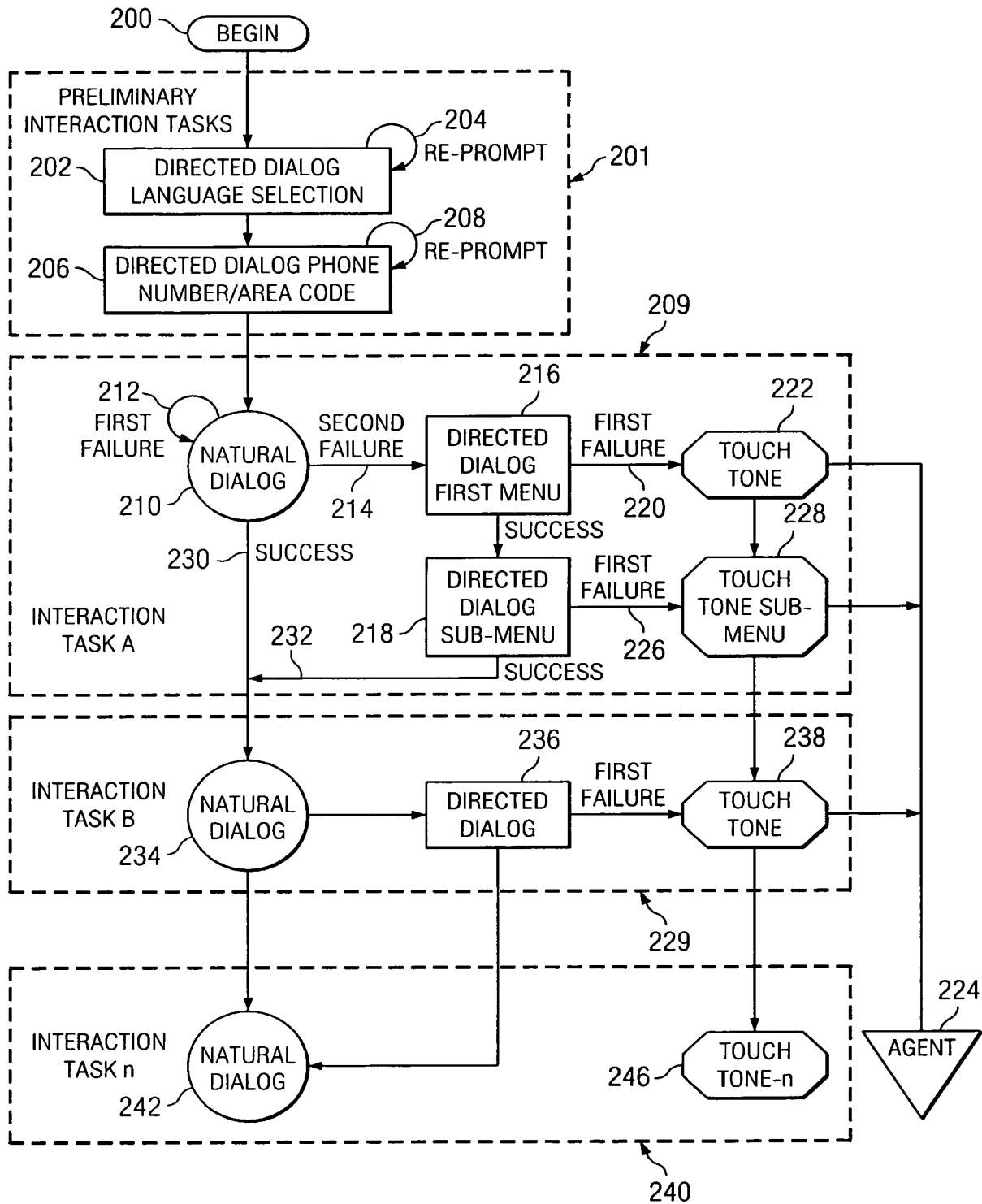Attorney Docket No. 064198.0179
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FIG. 3

100 — BEGIN

PRELIMINARY INTERACTION LEVEL 102

104 — DIRECTED DIALOG LANGUAGE SELECTION — 106 FAILURE RE-PROMPT

108 — DIRECTED DIALOG PHONE NUMBER/AREA CODE — 110 FAILURE RE-PROMPT

123

INTERACTION TASK A

124 FIRST FAILURE — NATURAL DIALOG-1 (122) — SECOND FAILURE — 126 DIRECTED DIALOG-1 — FIRST FAILURE — 128 TOUCH TONE-1 — FIRST FAILURE

SUCCESS — SUCCESS

INTERACTION TASK B (131)

162 — 162

133 FIRST FAILURE — NATURAL DIALOG-2 (132) — SECOND FAILURE — DIRECTED DIALOG-2 (134) — FIRST FAILURE — 136 TOUCH TONE-2 — FIRST FAILURE

SUCCESS — SUCCESS — SUCCESS

164 — 137

INTERACTION TASK n

139 FIRST FAILURE — NATURAL DIALOG-n (138) — SECOND FAILURE — 140 DIRECTED DIALOG-n — FIRST FAILURE — 164 — 142 TOUCH TONE-n

SUCCESS

AGENT — 130

144

ERROR MANAGEMENT MODULE	COUNTER	SET POINT
GLOBAL ERROR	0 146	X 148
NATURAL LANGUAGE DIALOG ERROR	0 150	2 152
DIRECTED DIALOG ERROR	0 154	1 156
TOUCH TONE DIALOG ERROR	0 158	1 160

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FIG. 4

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FIG. 5A

(D) 300 — BEGIN

302 — CONDUCT INTERACTION TASK A - FIRST DIALOG STATE

UPDATE ERROR MANAGEMENT MODULE — 306

304 — USER ERROR? — YES

308 — GLOBAL ERROR COUNTER EQUALS GLOBAL ERROR SETPOINT? — YES — 310 — SEND TO AGENT

NO

NO

318 — CONDUCT INTERACTION TASK B - FIRST DIALOG STATE

312 — ONE DEC EQUALS ONE DSP? — NO — 314 — RE-PROMPT

320 — USER ERROR? — YES

332

C FROM FIG. 5B

YES

CONDUCT INTERACTION TASK n - FIRST DIALOG STATE

CONDUCT INTERACTION TASK A - SECOND DIALOG STATE — 316

(D)

322 — UPDATE ERROR MANAGEMENT MODULE

334 — USER ERROR? — YES

A TO FIG. 5B

NO

YES — GLOBAL ERROR COUNTER EQUALS GLOBAL ERROR SETPOINT? — 324

CONDUCT INTERACTION TASK B - SECOND DIALOG STATE — 346

SEND TO AGENT

NO

326

USER ERROR? — NO

ONE DEC EQUALS ONE DSP? — YES

CONDUCT INTERACTION TASK n - SECOND DIALOG STATE — 360

328

YES — 348

NO

UPDATE ERROR MANAGEMENT MODULE — 350

330 — RE-PROMPT

GLOBAL ERROR COUNTER EQUALS GLOBAL ERROR SETPOINT? — YES — SEND TO AGENT

352 — 354

NO

TWO DEC EQUALS TWO DSP? — NO — 358 — RE-PROMPT

YES

B TO FIG. 5B

356

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FROM [A] FIG. 5A

336 — UPDATE ERROR MANAGEMENT MODULE

338 — GLOBAL ERROR COUNTER EQUALS GLOBAL ERROR SETPOINT ?

YES → SEND TO AGENT

NO

340 — TWO DEC EQUALS TWO DSP?

NO → 342 → RE-PROMPT → C → TO FIG. 5A

YES

362 — PERFORM INTERACTION TASK A THIRD DIALOG STATE

FROM FIG. 5A [B]

364 — USER ERROR?

NO → (to 380)

YES

366 — UPDATE ERROR MANAGEMENT MODULE

PERFORM INTERACTION TASK B THIRD DIALOG STATE — 380

382 — USER ERROR?

NO → PERFORM INTERACTION TASK n THIRD DIALOG STATE — 396

YES

368 — GLOBAL ERROR COUNTER EQUALS GLOBAL ERROR SETPOINT ?

YES → SEND TO AGENT 370

NO

UPDATE ERROR MANAGEMENT MODULE

384

372 — THREE DEC EQUALS THREE DSP?

YES → SEND TO AGENT 376

NO → RE-PROMPT 374

386 — GLOBAL ERROR COUNTER EQUALS GLOBAL ERROR SETPOINT ?

YES → SEND TO AGENT 388

NO

390 — THREE DEC EQUALS THREE DSP?

YES → SEND TO AGENT 394

NO → 392 — RE-PROMPT

FIG. 5B